RAPID CHANGE AND STASIS IN A CORAL REEF SPONGE COMMUNITY. Memoirs of the Queensland Museum 44: 674. 1999:- Four censuscs of a sponge community on a shallow coral reef in San Blas, Panama, have revealed a combination of both extreme change and also apparent stasis over the 14 years between 1984-1998. Total biomass of the sponge assemblage varied little over the first 11 years, with the exception of the first few years after a hurricane decreased sponge populations in 1988. However, relative contributions to total biomass by the different species have changed to the extent that over half of the original species are now altogether absent from the censused area. Species lost were not necessarily those that had been rare initially, and the hurricane does not

appear to have been responsible for the loss of species. The most striking pattern of loss is that keratose species account for a disproportionately large number of the species and also of the volume of biomass lost. Growth form also seems to influence vulnerability to loss, as massive forms were lost disproportionately and no erect branching forms were lost. Pathogens appear to be the agents of at least some of the mortality, with high rates of infection by what seem to be species-specific pathogens in the most common species. 

Porifera, coral reef sponges, population dynamics, disease, environmental ecology.

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